

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-2. Canceled.

3. (Currently amended) [[An]] A pedal reaction force applying apparatus according to claim 2, for applying a reaction force to a pedal member which is pivotably supported by a support shaft and which is depressible to be pivoted about an axis of said support shaft, said apparatus comprising:

a reaction-force applying device for applying said reaction force to said pedal member and changing said reaction force;

a reaction-force controlling device for controlling said reaction-force applying device such that said reaction force is changed on the basis of a depressing stroke of said pedal member, according to a predetermined pattern of change of said reaction force,

wherein said reaction-force applying device includes:

a spring member which is connected, at one of opposite ends thereof, with a connected portion of said pedal member that is spaced away from said axis of said support shaft, and which is elastically deformed upon depression of said pedal member, for thereby applying said reaction force to said pedal member; and

a reaction-force changing mechanism for changing said reaction force, by moving the other of said opposite ends of said spring member toward and away from said connected portion of said pedal member,

wherein said reaction-force changing mechanism includes a cam member which is pivotable about an axis of a pivot shaft and which has an engaged portion whose distance from said axis of said pivot shaft is continuously changed as viewed in a circumferential direction of said cam member,

and wherein said engaged portion of said cam member is held in engagement with said other of said opposite ends of said spring member, so that said other of said opposite ends of said spring member is movable toward and away from said connected portion of said pedal member, by said engaged portion as a result of the pivotable motion of said cam member.

4. Canceled.

5. (Currently amended) An apparatus according to claim ~~[[1]]~~ 3, wherein said reaction-force controlling device includes a transmission mechanism which connects said pedal member with said ~~changeable~~ reaction-force applying device, for transmitting pivot motion of said pedal member to said ~~changeable~~ reaction-force applying device upon depression of said pedal member.

6. (Currently amended) An apparatus according to claim ~~[[1]]~~ 3, wherein said reaction-force controlling device includes a stroke sensor for detecting said depressing stroke of said pedal member, and a controller for controlling said ~~changeable~~ reaction-force applying device on the basis of said depressing stroke of said pedal member detected by said stroke sensor,

and wherein said ~~changeable~~ reaction-force applying device includes a drive device for changing said reaction force on the basis of a signal supplied from said controller.

7. (Currently Amended) An apparatus for applying a reaction force to a pedal member which is pivotably supported by a support shaft and which is depressible to be pivoted about an axis of said support shaft, said apparatus ~~by~~ comprising:

a cam member which is pivotable about an axis of a pivot shaft that is parallel with said axis of said support shaft, and which has an engaged portion whose distance from said axis of said pivot shaft is continuously changed as viewed in a circumferential direction of said cam member,

a transmission mechanism which connects said pedal member with said cam member, for transmitting pivot motion of said pedal member to said cam member upon depression of said pedal member and

a spring member which is interposed between said cam member and a longitudinally intermediate portion of said pedal member that is distant from said support axis of said support shaft, said spring member being elastically deformed upon depression of said pedal member, for thereby applying said reaction force to said pedal member, said spring member having an engaged end portion which is held in engagement with said engaged portion of said cam member and which is displaceable following a profile of said engaged portion of said cam member, for thereby changing said reaction force applied to said pedal member.

8. (Previously Presented) An apparatus according to claim 3, wherein said engaged portion of said cam member is provided by an outer circumferential surface of said cam member.

9. (Previously Presented) An apparatus according to claim 3, wherein said reaction-force controlling device includes a transmission mechanism which connects said pedal member with said cam member, for transmitting a pivotable motion of said pedal member to said cam member upon depression of said pedal member,

and wherein said transmission mechanism includes a first pulley which is pivotable together with said pedal member about said axis of said support shaft, a second pulley which is pivotable together with said cam member about said axis of said pivot shaft, and a timing belt which connects said first and second pulleys.

10. (Previously Presented) An apparatus according to claim 3, wherein said reaction-force controlling device includes a transmission mechanism which connects said pedal member with said cam member, for transmitting a pivotable motion of said pedal member to said cam member upon depression of said pedal member,

and wherein said transmission mechanism includes a first meshing member which is pivotable together with said pedal member about said axis of said support shaft, and a second meshing member which is pivotable together with said cam member about said axis of said pivot shaft and which is held in meshing engagement with said first meshing member.